Happenings

at the Science Advisory Board ...insuring a solid technical basis for environmental protection

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This issue consists of eleven (Courier) pages.

TABLE OF CONTENTS

- 1. Editorial: SEEKING NEW WINESKINS FOR NEW WINE
- 2. Tentative Calendar for May and June
- 3. SAB Reports in Progress
- 4. Abstracts of New Reports

Review of the FY 1999 Presidential Budget
Request for the Office of Research and Development
EPA-SAB-RSAC-98-006

Review of the OPPT's Toxics Release Inventory Relative Risk-Based Environmental Indicators Methodology EPA-SAB-EEC-98-007

- 5. Committee Activities in April
- 6. Updates
- 7. The Board's Bio (a new attraction)
- 8. Members, Consultants, and Staff News
- 9. Bon Mot.

1. EDITORIAL

SEEKING NEW WINESKINS FOR NEW WINE

Over the past few years, the Agency has been making some significant additions to its line of traditional products for protecting public health and the environment. Specifically, in addition to the "old wine" of criteria, standards, and regulations, the Agency has introduced a number of innovative approaches. This new wine comes bottled under several labels; e.g., sector-based environmental protection, regulatory

negotiation, and place-based environmental protection. Some veteran Agency-watchers have likened this change as a shift from "Old Thunder-bolt" to "Reg Lite".

The Science Advisory Board (SAB) has sampled and savored some of this new wine, finding it to be promisingly more full-bodied than earlier vintages, with a refreshingly innovative bouquet. In fact, some of these same attributes will be found in the Board's own Integrated Risk Project that has been brewing for some time and will be released for peer review this summer.

At the same time, the Board was puzzled about how its traditional containers (e.g., Reviews and Advisories -- old wineskins, if you will) can accommodate these new Agency products. For example, some have argued that an after-the-fact SAB Review of the science underlying an already-agreed-upon Reg Neg holds greater promise of souring the wine than it does of improving it.

During the April meeting of its Executive Committee, the SAB heard presentations from Agency personnel about five different innovative approaches -- out of a list of more than 50 on the EPA Website -- being pursued today. These included such topics as Common Sense Initiative, National Environmental Protection Partnerships, and Sustainable Industries.

The Board found this all to be rather heady stuff. One member said it was both the most exciting and the most frustrating presentation that he had ever heard at an SAB meeting. It was exciting because of the innovations and bold thinking reflected in the new approaches, and it was the most frustrating because of the lack of detail -- particularly as it related to the role and input of science -- in the presentations.

Therefore, the SAB Executive Committee has appointed a Planning Committee to explore hosting/catalyzing a workshop early next calendar year to examine where/when/how science can best encourage and improve these new approaches. Over the next several months HAPPENINGS will be a vehicle for sharing details of the workshop as they emerge. We would also be happy to hear from readers about their own views on the role of and mechanisms for scientific input in the Agency's new approaches.

In short, we are seeking new wineskins for new wine.

Donald G. Barnes, PhD Staff Director

2. TENTATIVE CALENDAR FOR MAY AND JUNE

Several of the FACA meetings below have been announced in the Federal Register (FR), together with additional background information. Readers can automatically receive e-mailed copies of FR Notices by subscribing to the SAB Listserver; see Section 6.b.(2) below.

If a series of meetings is anticipated, the number of the meeting in the series is indicated in parentheses; e.g., "(#2)"

If a meeting is to be conducted via publicly accessible conference call, the data is enclosed in brackets: "[.....]"

A glossary of acronyms appears at the end of the list of June meetings.

MAY

Apr 30-Ma	y 1 Review of Health Risk Assessment for 1,3-Butadiene Co-Chair: Dr. Mark Utell, University of Rochester DFO: Ms. Roslyn Edson (edson.roslyn@epa.gov)	EHC N.Conference #3 DC
May 5	PM NAAQS Development Plan (morning only) Chair: Dr. Joe Mauderly,	CASAC Governor's Inn RTP, NC
May 5-6	Diesel Health Assessment Document (starts the afternoon of May 5th) Chair: Dr. Joe Mauderly, Lovelace Respiratory Research Institute DFO: Mr. Robert Flaak (flaak.robert@epa.gov)	CASAC Governor's Inn RTP, NC
May 5-6	Endocrine Disruptors Chair: Dr. Ernest McConnell, ToxPath, Inc. DFO: Ms. Anne Barton (barton.anne@epa.gov)	SAP/SAB Holiday Inn (Ballston) Arlington, VA
May 5-6	Agency Computer Models: e.g. TRIM Chair: Dr. Ishwar Murarka, Ish Inc. DFO: Dr. John Fowle (fowle.jack@epa.gov)	EC Subc 3709M DC
May 7-8	Federal Guidance 13 Chair: Dr. Stephen Brown, R2C2 DFO: Dr. Jack Kooyoomjian (kooyoomjian.jack@epa.gov)	RAC 1103 WT DC

May 14 Planning EPEC Chair: Dr. Mark Harwell, University [Tele] of Miami TBD DFO: Ms. Stephanie Sanzone (sanzone.stephanie@epa.gov) JUNE June 2 Federal Guidance 13 RAC Chair: Dr. Stephen Brown, R2C2 [Tele] DFO: Dr. Jack Kooyoomjian 3709M (kooyoomjian.jack@epa.gov) June 9-10 Review of RFC Methods and Review of EHC Acute Reference Exposure Methods Main Auditorium Chair: Dr. Emil Pfitzer, Research Inst. RTP, NC for Fragrance Materials, Inc. DFO: Ms. Roslyn Edson (edson.roslyn@epa.gov) June 18-19 Issues TBA DWC Chair: Dr. Richard Bull, Battelle Pacific TBD Northwest National Lab. DFO: Mr. Tom Miller (miller.tom@epa.gov) June 22-23 Issues TBA IHEC Chair: Dr. Henry Anderson, Wisconsin Bureau TBD of Public Health DFO: Ms. Roslyn Edson (edson.roslyn@epa.gov) TBA FY97 STAA Review EC Subcomm. Chair: Dr. Herb Ward, Rice University Closed DFO: Mr. Robert Flaak (flaak.robert@epa.gov) TBA Review Meeting ECChair: Dr. Joan Daisey, Lawrence [Tele] Berkeley Laboratory TBD DFO: Dr. Donald Barnes (barnes.don@epa.gov) TBA Peer Review of the IRP Project EC Subcomm. Chair: Dr. Granger Morgan, Carnegie Mellon TBD University DFO: Dr. John Fowle

(fowle.jack@epa.gov)

Glossary of acronyms for the uninitiated = Clean Air Scientific Advisory Committee CASAC COUNCIL = Council on Clean Air Compliance Analysis AQMS = Air Quality Modeling Subcommittee HEES = Health and Ecological Effects Subcommittee DC = Washington, DC DFO = Designated Federal Official (SAB Staff lead) = Drinking Water Committee DWC = Executive Committee ECEEAC = Environmental Economics Advisory Committee = Environmental Engineering Committee EEC EHC = Environmental Health Committee EPEC = Ecological Processes and Effects Committee = Integrated Human Exposure Committee IHEC IRP = Integrated Risk Project EAS = Economics Analysis Subcommittee ERS = Ecological Risk Subcommittee HEHS = Human Exposure and Health Subcommittee RROS = Risk Reduction Options Subcommittee SC = Steering Committee VS = Valuation Subcommittee RAC = Radiation Advisory Committee RSAC = Research Strategies Advisory Committee = Research Triangle Park, NC RTP = Scientific Advisory Panel (FIFRA)(Not SAB affiliated) SAP TBA = To Be Announced TBD = To Be Determined [Tele] = Publicly accessible telephone conference call

3. SAB REPORTS IN PROGRESS

a. SCHEDULED FOR A LATER EC MEETING

1)ORD Budget Presentation Process

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2)Uncertainties in Radiogenic Cancer	RAC		
Risk Estimates			
3) Federal Guidance 13	RAC		
4) Environmental Radiation Ambient	RAC		
Monitoring System (ERAMS)			
5) IRP Final Integrated Report	EC Subcomm.		
6) IRP Final Overview Report	EC Subcomm.		
7) IRP Risk Reduction Report	EC Subcomm.		
8) Surface Impoundments Survey	EEC		
9) Blackstone River Initiative	EPEC		
10) Report on the Utility of Proactive	EEC		
Technical Advice			
11) Economic Research Topics	EEAC		

RSAC

b. PROJECTS THAT HAVE RECEIVED EC APPROVAL AND AWAIT COMPLETION

None

c. SAB REPORTS THAT DO NOT REQUIRE EC APPROVAL (CASAC and COUNCIL) THAT ARE ALSO UNDER DEVELOPMENT

Prospective Study: Overview
--COMMITTEE DRAFT IN PREPARATION

COUNCIL

Report on the Emissions Portion of the Prospective Section 812 Study -- COMMITTEE DRAFT IN PREPARATION

AQMS/COUNCIL

Report on the Health and Ecological Effects HEES/COUNCIL of the Prospective Section 812 Study
--COMMITTEE DRAFT IN PREPARATION

4. ABSRTACTS OF NEW REPORTS

Review of the FY 1999 Presidential Budget Request for the Office of Research and Development EPA-SAB-RSAC-98-006

On February 26-27, 1998, the Research Strategies Advisory Committee (RSAC) of the Science Advisory Board (SAB) met to review the FY1999 Presidential Budget Request for the Office of Research and Development (ORD). The Committee considered how well the proposed budget request: a) reflected priorities identified in the EPA and ORD Strategic Plans; b) supported a reasonable balance between core research on multimedia capabilities/issues and media-specific problem-driven topics; c) balanced near-term and long-term research issues; d) had sufficient resources to achieve the objectives of the research and development program; and e) how ORD can improve upon the Government Performance and Results Act (GPRA) structure to communicate research plans, priorities, research requirements, and planned outcomes.

The Committee noted that the FY1999 ORD and EPA budgets are the first goals-based research budgets put forth by the Agency. The budget represented a concerted effort on the part of the ORD to develop the requested funding allocations around the ORD Strategic Plan. The plan and budget were developed in concert with the program offices to develop goals consistent with customer needs. For the first time it is possible to examine and evaluate how the money is allocated to various programs, to science and technology activities and to various strategic goals.

While pleased with the presentation of the budget, RSAC was disturbed to note that the research budget is declining when viewed as percentage of the overall Agency budget, as well as in real purchasing power. In particular, the Committee concluded that the budgets proposed in several areas were not likely to be sufficient to meet the goals established by the Agency and ORD in their Strategic Plans. These areas included particulate matter, endocrine disruptors, ecosystem protection, global climate change, waste site remediation technologies, microbial pathogens and indoor air.

Review of the OPPT's Toxics Release Inventory Relative Risk-Based Environmental Indicators Methodology EPA-SAB-EEC-98-007

The Science Advisory Board (SAB) assessed the technical merits of the Toxics Release Inventory (TRI) Relative Risk-Based Environmental Indicator methodology developed by the Office of Pollution Prevention and Toxics (OPPT). The methodology employs the same toxicity weighting for chemical releases as the Sector Facility Indexing Project previously reviewed by the SAB (EPA-SAB-EEC-97-012). The TRI Relative Risk-Based Environmental Indicator methodology also considers fate, transport, and the exposed population.

The methodology's consideration of exposure and populations in its estimation of risk is an improvement over estimates based solely on the mass of annual releases or solely on toxicity-weighted releases.

To improve the methodology, the Subcommittee recommends that the methodology: a) use actual, rather than binned, toxicity values; b) more appropriate exposure models be used with region-specific data (and, when available, site-specific data); and b) use actual population numbers rather than rural population default value of 1000.

The Subcommittee recommends that the EPA subject the TRI methodology to sensitivity and uncertainty analyses and portray uncertainty in the final results. This will allow potential users the ability to use the output with the proper confidence.

5. COMMITTEE ACTIVITIES IN APRIL

SAB Committees conducted four FACA meetings in April. All of them face-to-face public meetings.

On April 9, the Environmental Economics Advisory Committee (EEAC) met. The meeting began with a visit from the Deputy Administrator who reinforced his desire to have the EEAC assist the agency in finding ways to use economics to more fully understand the effects of environmental management actions on people and the environment. The committee also interacted with representatives of EPA and other groups who are developing approaches to advance EPA's economic assessment activities. In addition, the committee began its efforts to respond to an agency request for advice on an economics research plan now being developed for EPA.

On April 13-14, the Integrated Risk Project Steering Committee (IRPSC) met to discuss two reports that it is developing to convey its messages on Integrated Environmental Decision Making to the agency. Extensive discussions of the main messages resulted in directions being

given by the IRPSC that will result in both documents being submitted to the SAB Executive Committee for review and approval early this summer.

On April 15-16, the SAB Executive Committee met on April 15-16. Draft minutes from the meeting are posted on the SAB Website.

The EC members had fruitful discussions with Deputy Administrator Fred Hansen, DAA of the Office of International Affairs, Alan Hecht, AA/Office of Research and Development, Henry Longest, and representative of the Office of Children's Health Protection, Meg Kelly.

The EC approved the RSAC review of the FY99 ORD budget request. In a discussion of the matter with the Deputy Administrator, the parties explored ways in which the SAB might provide advice on the research program at an earlier stage in the process in future years.

Much of the focus of the meeting was on how the SAB could provide more timely and useful scientific advice to innovative programs being developed by the Agency; e.g., Community-Based Environmental Protection (CBEP) and Common Sense Initiative (CSI). The EC appointed a committee to plan a workshop for early next year that will address the role that science can play in some of these new approaches.

On April 27-29, the Data Quality Subcommittee of the Environmental Engineering Committee conducted the first of a series of meetings aimed at advising the Agency on its Quality Program, currently centered in ORD's National Center for Environmental Research and Quality Assurance. Dr. John Maney is Chairing the review that will examine the Agency's a) policies on quality issues, b) documentation on quality matters, and c) implementation issues. The group expects to issue its first report this summer.

6. UPDATES

a. Annual Report

The FY97 Annual Report of the SAB Staff, entitled "Extending Our Range," is available for distribution by contacting Mr. Derrick Pope at

Phone: 202-260-2460

Email: pope.derrick@epa.gov

This report provides a handy desk reference for SAB information. It includes

- 1) A brief history of the SAB
- 2) A summary of FY97 activities
- 3) A list of FY97 Members and Consultants
- 4) List of all FY97 reports, with Abstracts
- 5) And much, much more!

b. Computer News

The site offers such features as

- a) Full-text reports for FY94-FY98
- b) Background information about the structure, function, and membership of the SAB
- c) A rolling two-month calendar of SAB meetings
- d) The most current issue of HAPPENINGS
- e) Draft/final agendas of upcoming meetings and draft/final minutes of past meetings.
- f) And much...well, maybe a little bit...more!

2) SAB Listserver

By subscribing to the free SAB Listserver, you will automatically receive copies of all Federal Register notices announcing SAB meetings, together with brief descriptions of the topics to be covered at the meetings. These notices will be e-mailed to you within 24-hours of their publication in the Federal Register.

To subscribe, simply send the following message, inserting your names,

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7. THE BOARD'S BIO

As part of our efforts to improve getting out the SAB word through "Happenings", we have launched a new column, the Board's Bio to feature one of our members each month so you can learn about our SAB family. In this third Board's Bio, let us introduce you to Dr. Granger Morgan.

At EPA, Dr. Morgan is an at-large member of the SAB's Executive Committee. Back home, Dr. Morgan heads up the Department of Engineering and Public Policy in the School of Public Policy and Management at the Carnegie Mellon University.

A renaissance man, Dr. Morgan got his undergraduate degree in Physics and General Studies from Harvard College, followed by a Masters degree in Astronomy and Space Science at Cornell University, then graduate studies in history and social sciences at the University of California at Berkeley, and finally a Ph.D. in Applied Physics and Information Sciences at the University of California at San Diego.

His research focuses on the integrated assessment of large complex policy problems that involve science and technology. He also is interested in the treatment of uncertainty in quantitative policy

analysis, in risk analysis, management and communication, in the restructuring of the electric power system, and in several applied areas of technology and public policy.

Dr. Morgan's current work on integrated assessment is focused on global climate change. Many researchers are working to understand individual pieces of the climate problem. Dr. Morgan's integrated assessment work involves putting those pieces together to ask: how important might the problem be? What should be done about it? And, what issues most need research?

Of the many problems in risk analysis, management and communication that Dr. Morgan works on, one current interest involves developing methods to support risk management organizations, such as Federal agencies, in setting priorities.

Dr. Morgan's work in technology policy addresses several diverse topics, including the future of the U.S. National Laboratories, the U.S. policy toward the export of "dual use" high technology products, information security and privacy, and U.S. relations with India in the domains of technology development and international security.

We're pleased to introduce you to Dr. Morgan, and we thank him for his help to the Board as it provides advice to EPA about how best to apply science to inform public policy.

8. MEMBER/CONSULTANT AND STAFF NEWS

Member/Consultants

On April 24 <u>Dr. Paul Deisler</u> and <u>Dr. Tom Dietz</u>, both of whom are consultants to the SAB's Integrated Risk Project, participated in a National Public Radio session of "Science Friday". They discussed and answered phone-in questions about the major environmental problems of the day. [There is no truth to the rumor that one benighted caller confused them with Click and Clack, the Tappitt Brothers, from NPR's "Car Talk".]

<u>Staff</u>

<u>Don Barnes</u> teamed up with former-SAB Staff member Ed Bender, to facilitate an application of the Agency's Cumulative Risk Guidance in the Agency's Region 5 office in Chicago. The Guidance is consistent with some of the main messages of the Board's Integrated Risk Project.

Candidates for SAB membership being recommended to the Agency through a Federal Register Notice Volume 63, Number 67, April 8, 1998 on pages 17172-17173.

9. BON MOT

Bob Huggett, former SAB member and AA/ORD, may be gone from the Agency but his chemist's brand of humor persists. A recent issue of C&E News carried a quote from a chemist in Whitefish Bay, WI, who -- when learning of the EPA's plan to restrict the use of manure as fertilizer -- rhetorically asked, "Is this merely an attempt to block off the old chip?"